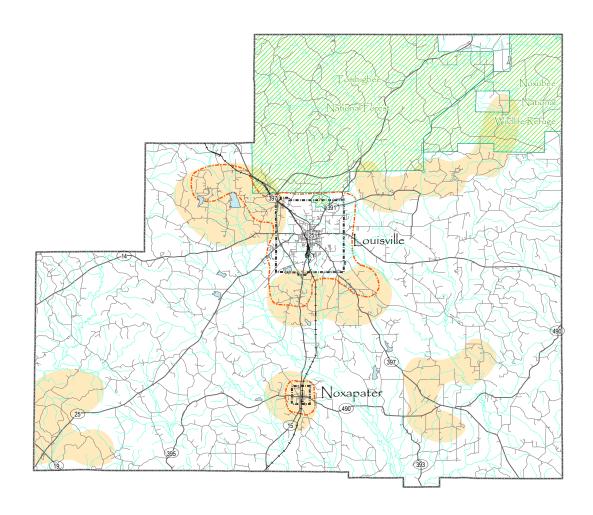
Winston County, Mississippi County Wildfire Protection Plan (CWPP)



SEPTEMBER 2008

Prepared by

GOLDEN TRIANGLE PLANNING AND DEVELOPMENT DISTRICT
WITH FUNDING PROVIDED BY THE MISSISSIPPI FORESTRY COMMISSION

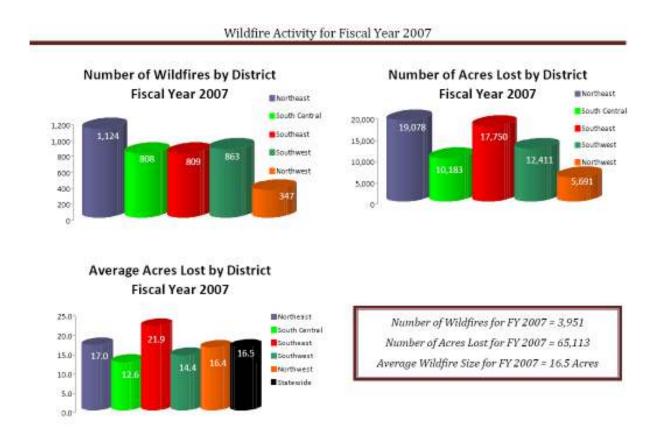
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1. INTRODUCTION

The County Wildfire Protection Plan (CWPP) for Winston County is an effort to address changes to the Wildland-Urban Interface (WUI) brought about by natural hazards as well as from increased development in many parts of the country in recent years. During the hurricane occurrences, an increased risk of wildfire remains a threat because of residual debris.

The Wildland-Urban Interface, where structures and other developments merge with undeveloped wildland or vegetative fuels, can create one of the most dangerous and complex situations for firefighters. The WUI zone can pose a significant risk to communities in the event of a large-scale wildfire. In a proactive effort to address these increased risks and others, Winston County has agreed to create a County Wildfire Protection Plan (CWPP). A CWPP can reduce the potential for loss in the event of a wildfire by identifying priorities for the protection of life, property and critical infrastructure within the WUI. Winston County comes under Northeast district that has maximum number of wildfires occurrences as well as maximum number of acres lost as shown in the graph below.



Source: Mississippi Forestry Commission individual fire reports.

Revised July 2007

During the early 2008, GTPDD personnel began gathering geographical data, historical fire information, etc. Planners then met with the local fire coordinator to review the information and obtain input on the strengths and weaknesses of the county fire departments and their ability to fight wildfires. Later, a Steering Committee was formed through cooperation of local, state and federal agencies, and other interested parties. The Steering Committee included representatives from the Winston Emergency Management Agency, the County Board of Supervisors, the Mississippi Forestry Commission, Noxubee Wildlife Refuge, USDA Forest service, and the County Fire Coordinator.

Over a period of about nine months, the Steering Committee produced a County Wildfire Protection Plan. The components of the plan include Geographic Information System produced maps, a County Risk Assessment, Mitigation Projects List, Structure Ignitability Recommendations, and an Action Plan and Assessment Strategy. It is the intent of the Steering Committee that this plan will be utilized to guide development and educate landowners, as well as address and then treat at-risk wildfire areas within the county.

This plan was developed with an effort toward consistency with the Healthy Forests Restoration Act of 2003, the County's Hazard Mitigation Plan and the Comprehensive Emergency Management Plan.

Winston County Community Wildfire Protection Plan Steering Committee

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II. AREA DESCRIPTION

Winston County has a population of 20,160 according to 2000 census. Winston County is named for military leader Louis Winston. Its county seat is Louisville. The county has a total area of 610 square miles (1,580 km²), of which, 607 square miles (1,572 km²) of it is land and 3 square miles (8 km²) of it (0.51%) is water.

Located in the rolling foothills of east central Mississippi, Winston County offers parks that preserve habitat for the avid bird watchers. Nanih Waiya Wildlife Management has areas for deer, duck and coon hunting. Nanih Waiya Mound site is one of the oldest Indian mounds in Mississippi with rich history and tradition.

The Noxubee Refuge is 42,500 acres comprised of bottomland and upland woodlands and is ideal for nature walks, fishing, hunting, and bird watching. These forest lands occupy a variety of game species including quail, deer, and turkey. The Refuge which is less than 8 miles from Louisville has many great hunting areas, fishing areas, pristine walking trails and many more outdoor activities.

Noxubee National Wildlife Refuge was created from lands obtained through the 1930's Resettlement Administration. Before Government ownership, the land area within the Refuge was intensively farmed and over grazed. After years of proper land stewardship, Noxubee is now an excellent example of forest and wildlife management. This change has caused a return of bountiful wildlife populations and a progression toward restoration of the pine and hardwood forest types that were so devastated in the early 1900's.

The Refuge provides needed habitat protection for the extremely valuable, rapidly disappearing bottomland hardwood forest communities. These forest lands are occupied by a variety of game species including quail, deer, and turkey.

The primary objective of the refuge is to provide resting and feeding habitat for migrating waterfowl and recreational activities of observing the wildlife in the area. The refugee does also allow regulated hunting in certain areas. The Refuge is an ecologist dream with a huge variety of species to observe in natural habitat from alligators to flying squirrels.

Legion State Park offers tranquil beauty, a peaceful atmosphere and a chance to connect to nature. It is located, close to the WUI, inside the city limits of Louisville and features several fishing areas along with miles of walking trails among some of the oldest miles of walking trails among some of the oldest and largest trees in the county. The Friends of the Park group is working on creating an even better atmosphere for bird watching.

Legion is a Civilian Conservation Corps park and the fourth of the original state parks constructed in the 1930s under President Franklin Delano Roosevelt's New Deal programs that rivals most in the state for beauty and natural splendor.

Legion State Park remains as unspoiled today as when the Choctaw Indian Nation first inhabited the area centuries ago. Hidden in the red hill country of Mississippi, Legion State Park strikes the perfect balance of natural beauty and modern comfort, with all man-made structures in the park designed to complement the pristine beauty of the area.

Noxapater's J. W. Young/Mollie Estes Park features a one of a kind arboretum and

teaching area of forestry. This arboretum is a place where an extensive variety of trees are being cultivated for scientific use to provide learning opportunities for students, industry professionals, gardeners, and community members. The Arboretum also adds natural beauty to an already well kept park which is used by many for morning and afternoon walks.

As of the census of 2000, there were 20,160 people, 7,578 households, and 5,471 families residing in the county. The population density was 33 people per square mile (13/km²). There were 8,472 housing units at an average density of 14 per square mile (5/km²). The racial makeup of the county was 55.26% White, 43.25% Black or African American, 0.66% Native American, 0.08% Asian, 0.28% from other races, and 0.46% from two or more races. 1.21% of the population was Hispanic or Latino of any race.

There were 7,578 households out of which 33.50% had children under the age of 18 living with them, 49.90% were married couples living together, 18.10% had a female householder with no husband present, and 27.80% were non-families. 25.20% of all households were made up of individuals and 12.50% had someone living alone who was 65 years of age or older. The average household size was 2.59 and the average family size was 3.09.

In the county the population was spread out with 26.80% under the age of 18, 9.20% from 18 to 24, 26.10% from 25 to 44, 22.50% from 45 to 64, and 15.50% who were 65 years of age or older. The median age was 36 years. For every 100 females there were 93.70 males. For every 100 females age 18 and over, there were 88.30 males.

Historical populations					
Census	Pop.	%±			
1840	4,650	_			
1850	7,956	71.1%			
1860	9,811	23.3%			
1870	8,984	-8.4%			
1880	10,087	12.3%			
1890	12,089	19.8%			
1900	14,124	16.8%			
1910	17,139	21.3%			
1920	18,139	5.8%			
1930	21,239	17.1%			
1940	22,751	7.1%			
1950	22,231	-2.3%			
1960	19,246	-13.4%			
1970	18,406	-4.4%			
1980	19,474	5.8%			
1990	19,433	-0.2%			
2000	20,160	3.7%			
Est. 2007	19,705	-2.3%			
MS Counties 1900-1990					

The median income for a household in the county was \$28,256, and the median income for a family was \$33,602. Males had a median income of \$28,665 versus \$18,210 for females. The per capita income for the county was \$14,548. About 19.40% of families and

23.70% of the population were below the poverty line, including 32.90% of those under age 18 and 18.90% of those were of age 65 or over.

In the county the population was spread out with 26.80% under the age of 18, 9.20% from 18 to 24, 26.10% from 25 to 44, 22.50% from 45 to 64, and 15.50% who were 65 years of age or older. The median age was 36 years. For every 100 females there were 93.70 males. For every 100 females age 18 and over, there were 88.30 males.

A summary of housing and income estimates for years 2006 and 2011 are presented here.

2006 Total Households						
_	Total	%				
Households	7,524					
Families	5,317	70.70%				

2006 Household Income Distribution							
	Total	%					
< \$10K	1,332	17.70%					
\$10-\$20K	1,149	15.30%					
\$20-\$30K	1,135	15.10%					
\$30-\$40K	983	13.10%					
\$40-\$50K	712	9.50%					
\$50-\$60K	611	8.10%					
\$60-\$75K	615	8.20%					
\$75-\$100K	510	6.80%					
> \$100K	477	6.30%					

2006 Household Net Worth					
	Total	%			
\$0 or Less	947	12.60%			
\$1-\$5000	1,082	14.40%			
\$5000-\$10000	525	7.00%			
\$10000-\$25000	903	12.00%			
\$25000-\$50000	978	13.00%			
\$50000-\$100000	1,219	16.20%			
\$100000-\$250000	1,387	18.40%			
\$250000-\$500000	527	7.00%			
\$500000 or More	264	3.50%			

2006 Total Number of Housing					
	Total	%			
Total Dwellings	8,746				
Owner-Occupied Dwellings	5,732	76.20%			
Renter-Occupied Dwellings	1,792	23.80%			
Housing Units Occupied	7,524	86.00%			

2006 Size of Household						
	Total	%				
1 Person	1,968	26.20%				
2 Person	2,493	33.10%				
3 Person	1,312	17.40%				
4 Person	1,005	13.40%				
5 Person	473	6.30%				
6+ Person	158	2.10%				

2011 Total Households					
	Total	%			
Households	7,465				
Families	5,184	69.40%			

2011 Household Income Distribution							
	Total	%					
< \$10K	1,274	17.10%					
\$10-\$20K	1,051	14.10%					
\$20-\$30K	1,129	15.10%					
\$30-\$40K	822	11.00%					
\$40-\$50K	766	10.30%					
\$50-\$60K	592	7.90%					
\$60-\$75K	647	8.70%					
\$75-\$100K	575	7.70%					
> \$100K	609	8.20%					

2011 Total Number of Housing					
	Total	%			
Total Dwellings	8,955				
Owner-Occupied Dwellings	5,485	73.50%			
Renter-Occupied Dwellings	1,980	26.50%			
Housing Units Occupied	7,465	83.40%			

2011 Size of Household						
	Total	%				
1 Person	1,991	26.70%				
2 Person	2,491	33.40%				
3 Person	1,287	17.20%				
4 Person	964	12.90%				
5 Person	457	6.10%				
6+ Person	153	2.00%				
Source: North Mississippi Industrial Development	t Authority / Applied Geographic Solutions					

The median income for a household in the county was \$28,256, and the median income for a family was \$33,602. Males had a median income of \$28,665 versus \$18,210 for females. The per capita income for the county was \$14,548. About 19.40% of families and

23.70% of the population were below the poverty line, including 32.90% of those under age 18 and 18.90% of those were of age 65 or over.

In the City of Louisville, there were 7,578 households out of which 33.50% had children under the age of 18 living with them, 49.90% were married couples living together, 18.10% had a female householder with no husband present, and 27.80% were non-families. 25.20% of all households were made up of individuals and 12.50% had someone living alone who was 65 years of age or older. The average household size was 2.59 and the average family size was 3.09.

The median income for a household in the city was \$27,485, and the median income for a family was \$31,750. Males had a median income of \$29,951 versus \$17,491 for females. The per capita income for the city was \$15,857. About 24.8% of families and 28.5% of the population were below the poverty line, including 39.3% of those under age 18 and 20.9% of those were of age 65 or over.

Summary of Demographics of Louisville and Noxapater

				Or	Race					Hispanic	
Geographic Area	Total population	Total	White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Some other race	Two or more races	or more	or Latino (of any race)
Mississippi	2,844,658	2,824,637	1,746,099	1,033,809	11,652	18,626	667	13,784	20,021	39,569	
PLACE	2,374,000	2,024,007	1,1 10,000	1,000,000	. 1,002	10,020	- 007	10,704	20,021	23,000	
City of Louisville	7,006	6,970	3,243	3,675	9	12	0	31	36	116	
Town of Noxapater	419	419	270	149	0	0	0	0	0	0	

In the *Town of Noxapater*, as of the census of 2000, there were 419 people, 171 households, and 121 families residing in the town. The population density was 417.2 people per square mile (161.8/km²). There were 191 housing units at an average density of 190.2/sq mi (73.7/km²). The racial makeup of the town was 64.44% White and 35.56% African American.

The median income for a household in the town was \$27,917, and the median income for a family was \$28,750. Males had a median income of \$25,500 versus \$18,500 for females. The per capita income for the town was \$13,658. About 16.9% of families and 18.4% of the

population were below the poverty line, including 25.7% of those under age 18 and 9.5% of those were of age 65 or over.

While climate conditions and debris can cause ignitability, certain industrial operations and facilities can also raise the threat of wildfire. Major transportation arteries through Winston County are - MS Highway 25 passing Southwest-Northeast, MS Highway 14 passing East-West, and MS Highway 15 passing North-South. These are regular routes to transport flammable, toxic and/or explosive materials, thus exposing the county to potential transportation incidents involving hazardous materials. In addition, there are several natural gas and oil pipelines that are located throughout the county as well as propane storage facilities. Volunteer Fire Departments within the county serve as first responders if an incident involving hazardous materials occurs.

Winston rural fire response areas covering the unincorporated portions of the county are presented in Chapter IV. The following table provides details of the fire districts/ response areas that are manned by volunteers who act as first responders to the fires within the rural county.

WINSTON COUNTY FIRE DEPARTMENTS

FIRE DEPARTMENT	CONTACT/ADDRESS	PHONE
Betheden VFD 600 Betheden Rd Louisville, MS 39339	Randle Livingston 247 Livingston Rd Louisville, MS 39339	662-773-2577
East Winston VFD 10340 Hwy 14 East Louisville, MS 39339	Mike Carr 1278 Yellow Creek Rd Louisville, MS 39339	662-773-8110
Highpoint VFD 1510 Highpoint Rd Louisville, MS 39339	Keeny Mayo 5056 Hwy 15 N Louisville, MS 39339	662-773-8957
Lobutcha VFD 1677 Hinze/Rural Hill Rd McCool, MS 39108	Ricky Steed 2719 Hinze/Rural Hill Rd McCool, MS 39108	662-773-7063
Louisville Fire Dept 304 S Spring St Louisville, MS 39339	Mike Stevenson 108 Athens Drive Louisville, MS 39339	662-773-9402
Mars Hill VFD 4470 Mars Hill Rd	Gregg Sisson 3980 Mars Hill Rd	662-724-2649

Philadelphia, MS 39350	Philadelphia, MS 39350	
Nanih Waiya VFD 13866 Hwy 397 Louisville, MS 39339	Allen Stokes 14349 Hwy 397 Louisville, MS 39339	662-773-5409
Noxapater VFD 36 E Alice St Noxapater, MS 39346	D. J. Reed 25 Culberson Rd Noxapater, MS 39346	662-724-2638
Shiloh VFD 2087 C. Huntley Rd Louisville, MS 39339	Jodey Garrard 578 Dempsey Rd Louisville, MS 39339	662-773-3907
County Fire Coordinator Winston County	Clarence Kelley Post Office Box 1085 Louisville, MS 39339	662-773-3651

III. STRATEGIC GOALS OF THE COUNTY WILDFIRE PROTECTION PLAN (CWPP)

The Winston County CWPP Steering Committee identified several goals during the planning process. These goals were set to provide a common vision during the process and to identify specific results to be obtained upon completion of the final document.

- 1. Define the Wildland-Urban Interface (WUI) for Winston County
- 2. Identify and prioritize high-risk areas within the WUI
- 3. Identify treatment methods for prioritized high-risk areas
- 4. Make recommendations to reduce structure ignitability
- 5. Make recommendations to improve needed resources for Volunteer Fire Departments:
 - Identify new funding mechanisms
 - Increase wildland firefighting training
 - Provide better/proper equipment needed to fight wildland fires
 - Identify recruitment and retention strategies for volunteers
 - Seek funding to employ additional paid full-time firefighters
- Identify strategies to improve firefighting capability of Mississippi Forestry Commission and to encourage collaboration and better communication between PRC and MFC
- 7. Identify education and outreach programs on wildfire prevention and techniques for proper burning for county residents
- 8. Strengthen subdivision regulations and county ordinances that will help reduce the risk of wildfire

Local Guide for developing a County Wildfire Protection Plan that was put together by National Association of State Foresters, International Association of Fire Chiefs, and the Wilderness Society was shown in the following page.

Leaders Guide for developing a Community Wildfire Protection Plan

This Leaders Goode was created for Leaders by Leaders and is designed to soult directly with "Preparing a Commonty Wilddiss Protection Plan - Handbook" available at www.adhet outpublicyandpressive ps. cfm.

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or mare specific information, refer to the Leader's Eurob Supplement

The Winston County Wildfire Protection Plan contains seven maps created by the Southern Mississippi Planning and Development District (SMPDD) Geographic Information Systems Department. These maps were created for planning purposes to aid in the assessment of county wildfire occurrence and emergency preparedness. The maps include the Winston County Base Map, Winston County Risk Assessment Ratings, Winston County Fire Data 2000-2006, High Occurrence Wildfire Areas, Arson Fires 2000-2004, Winston County Fire Response Area, Wildfires by Fire Response Area.

The county-wide base map provides a graphic baseline of infrastructure, roadways, inhabited areas, areas of community importance and a WUI designation. Initially, the WUI was set at ½-mile from existing municipal boundaries in accordance with the Healthy Forests Restoration Act of 2003. The Steering Committee then edited this line to include area developments within the county but not adjacent to municipalities. It was noted by the Steering Committee that the county is highly vegetated with many areas where wildland meets development. For this reason, the Winston County WUI will identify areas where the highest amount of development occurs and aid in identifying specific risk factors and treatment projects that have the potential to reduce the risk to life, property and critical infrastructure.

In addition to the WUI, the Steering Committee identified several areas of critical infrastructure including water towers, utilities and the E-911 communication tower. The Base Map has become a visual representation of the core elements of county protection as identified for the CWPP.

The Risk Assessment Map graphically reflects the results of the Risk Assessment portion of the County Wildfire Protection Plan process. The risk assessment process is explained in detail below. The resulting map reflects the infrastructure, roadways, municipalities and areas of community importance found on the base map. The Steering Committee assigned a risk rating to each of these attributes by considering available fuel load, frequency of wildfire occurrence, vulnerability of development and infrastructure, and emergency preparedness. These ratings were then displayed in map form to better enable review and assessment of the entire county.

Several fire occurrence maps were created from data collected from the Mississippi Forestry Commission (MFC). The data portray both wildfires and controlled burns, and several different causes of fires. Fire causes include lightning, campfire, smoking, debris burning, arson, and equipment use. The fire occurrence maps were utilized in the Risk Assessment portion of the CWPP and as a valuable reference during the process of formulating mitigation projects and action items.

Using GTPDD's Geographic Information System capabilities, all fires and all causes, recorded between 2001 and 2007 by the MFC, are reflected on the Winston County Wildfires 2001-2007 map. When these data are mapped, it becomes apparent that there are specific geographic areas where there is a high occurrence of wildfire.

The High Occurrence Wildfire Areas are based on a computer calculation used to determine density and distribution by comparing each fire occurrence to its surrounding neighbors. Six regions were delineated as high occurrence areas. Area 1 is geographically located on the Southern edge of Noxubee National Wildlife Refuge and Tombigbee National Forest. Area 2 is located Northwest of Louisville and Southwest of Tombigbee National Forest. Area 3 is located South of Louisville on either side of MS Highway 15. Area 4 is located in the Southeastern corner of Winston County around Highway 397. Area 5 is around the Town of Noxapater extending towards West and South. Area 6 is located in the Northwestern corner of Winston County around MS Highway 25. Though this areas has high occurrence of wildfires, the impact is very minimal as that area is sparsely populated.

Winston County had a total of 323 wildfires between 2002 and 2007 that were recorded by the Mississippi Forest Commission (MFC). These fires do not include the events that were responded by the local voluntary fire departments. The MFC recorded fires alone constitute about 3305 acres of burning. 75% of the total wildfires were caused by debris burning (4) and incendiary/arsenal (5).

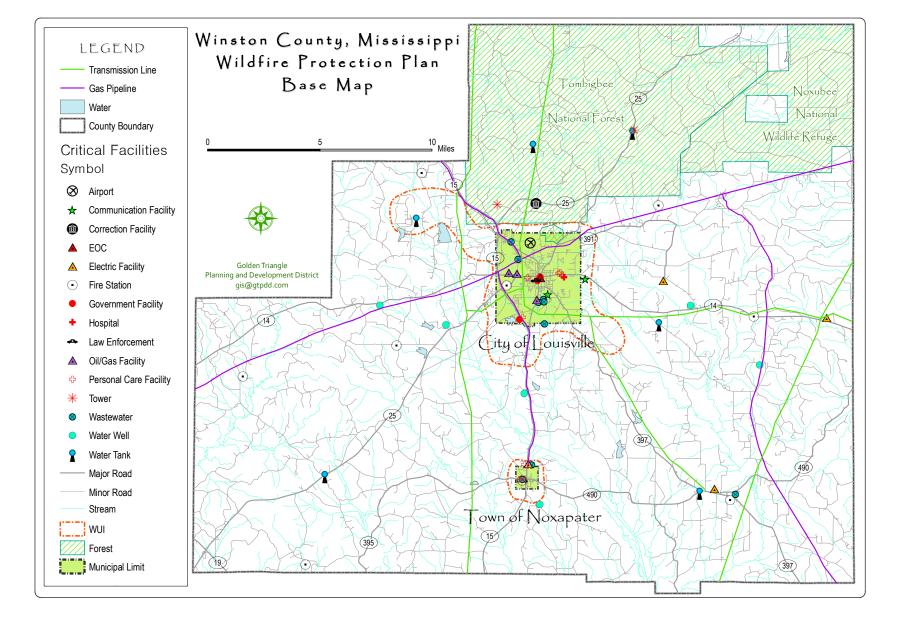
Winston County Wildfires 2001-2007

TOTAL	ACRES					FIF	RE CAUS	E				
FIRES	BURNED	0	1	2	3	4	5	6	7	8	9	10
323	3305	28		1		131	145	4	1	1	8	4

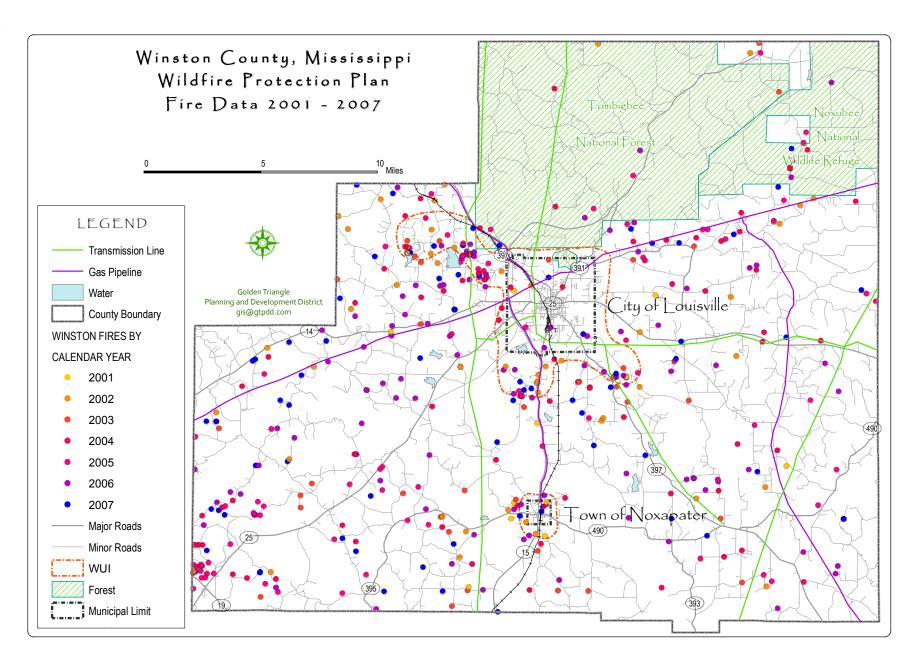
The Winston County Fire Response Area map reflects the county fire station response areas with respective boundaries, as well as each volunteer fire station location. In addition, a map reflecting all wildfires 2001-2007 as well as fire district boundaries and department locations has been included. Wildfires 2001-2007 by Fire Response Area will aid in the assessment of numbers of fires and their general location within each district.

The maps that were presented in the following pages include,

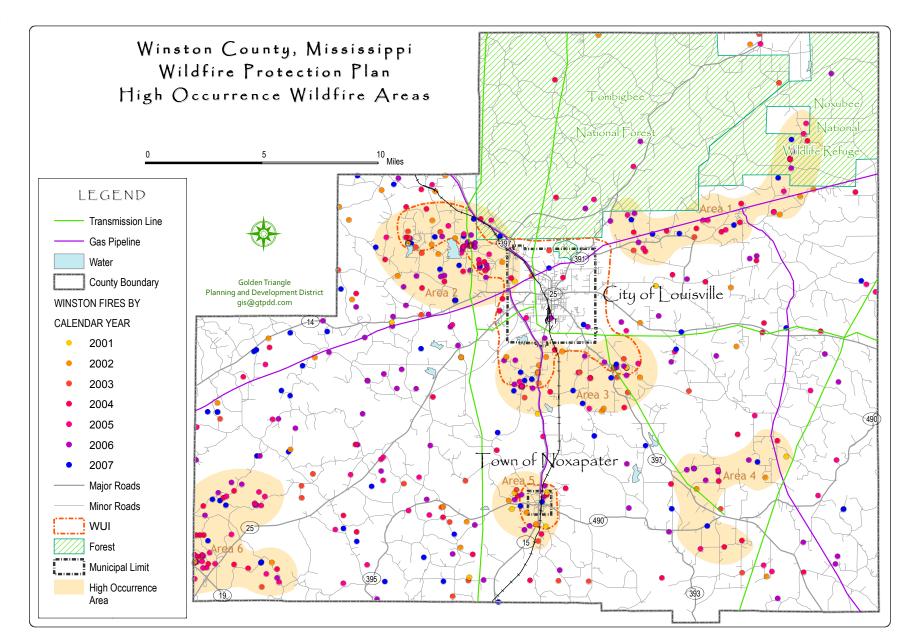
Base Map
Risk Assessment Ratings
Fire Data 2001 – 2007
High Occurrence Wildfire Areas
Arson Fires 2001 – 2007
Fire Response Areas
Wildfires by Response Area.

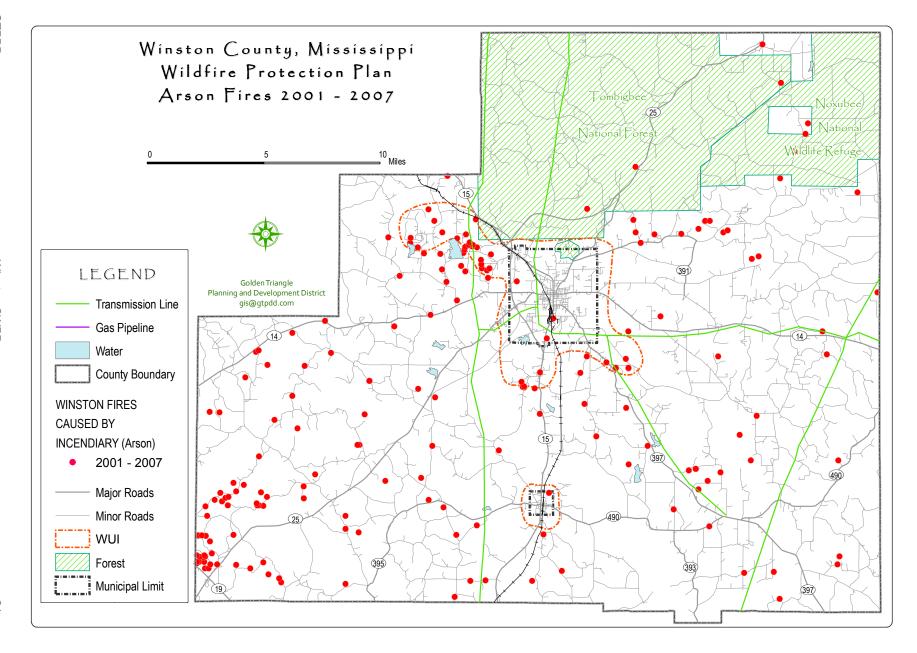


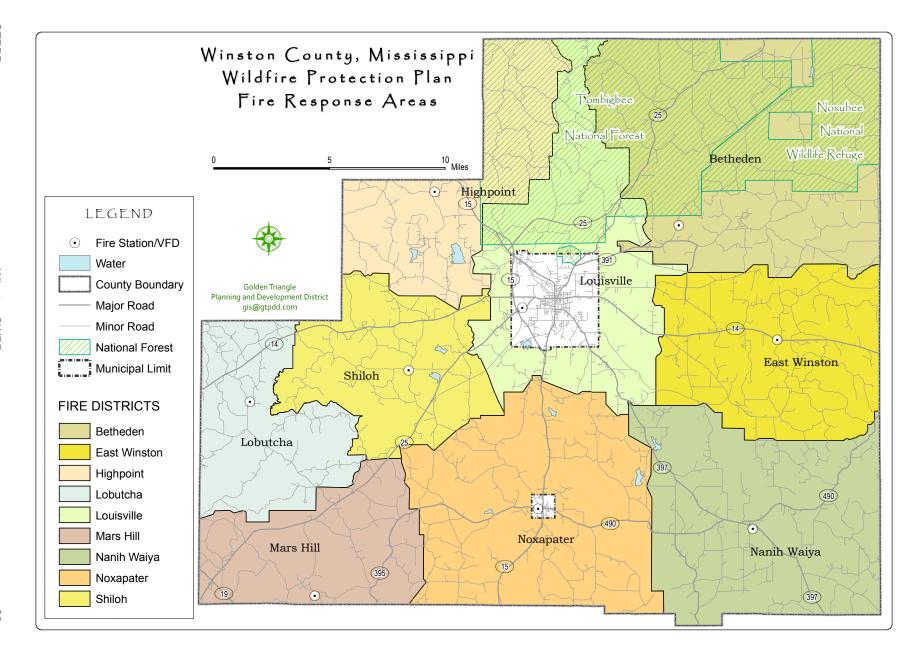


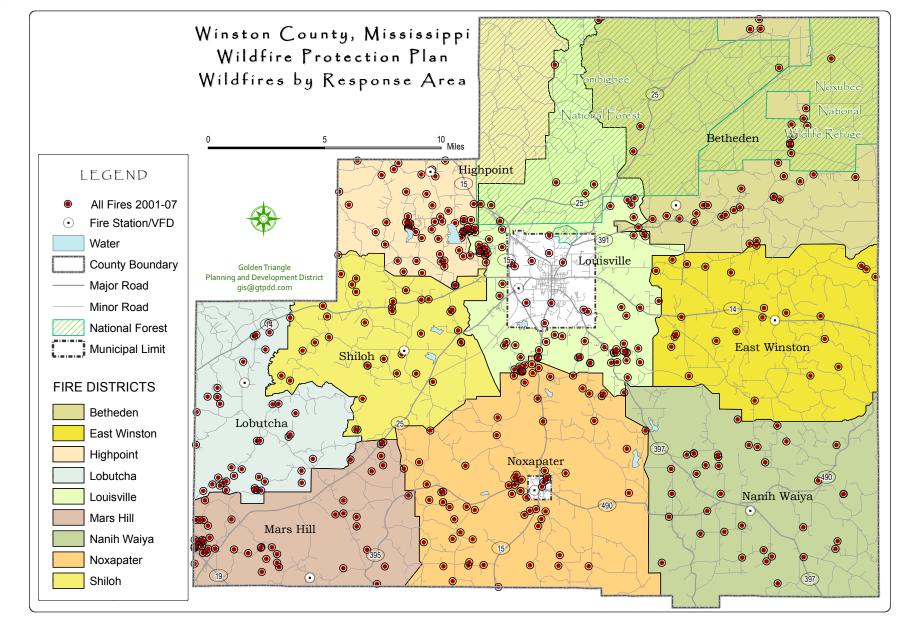












V. RISK ASSESSMENT

Through the County Risk Assessment fuel hazards, frequency of wildfire occurrence, vulnerability of development and infrastructure, and emergency preparedness were all considered to compile the following list of county areas at risk from wildfire.

The Steering Committee attempted to identify large facilities that may be at risk from wildfires due to their location, function, or potential impact to the community if damaged or lost to wildfire. Once identified, these at-risk areas were prioritized to enable available financial and human resources to be concentrated on specific mitigation projects in the future.

For the purpose of this plan, these areas were rated from low to high. Areas receiving the highest rating pose an increased risk due to their function, amount of nearby fuel load or may cause significant community impact in the event of damage or loss due to a wildfire. Mitigation for at-risk areas include a wide array of activities. Removal or reduction in fuel load may be suggested for some areas with a public awareness campaign suggested for others.

In Winston County, none of the critical facilities met the High risk criteria. Two voluntary fire departments – Betheden and East Winston – were rated as Medium-High risk. Seven other critical facilities were rated as Medium risk, and the rest as Low risk.

The following ranking key is used for representing each of the critical facilities both in the map and text.

- Low Risk
- Medium Risk
- Medium-High Risk
- High Risk

All the critical facilities discussed in this section were also presented in map with appropriate ratings.

The following critical facilities are ranked as **Medium-High** risk.

Betheden Voluntary Fire Department

This facility is located inside the High Fire Occurrence area and in proximity to the wooded area as shown from the aerial view below.



East Winston Voluntary Fire Department

This facility is located along the Highway 14, and in proximity to the wooded area as shown from the aerial. The photograph of the facility shows the risk of





vegetation or brush adjacent to the structure.





The following critical facilities are ranked as **Medium** risk.

■ High Point Fire Department

This structure is covered with thick vegetation and is considered at risk.





■ Lobetcha Volunteer Fire Department

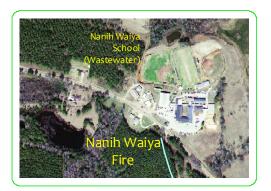
This structure is in the middle of woods and is covered with thick vegetation and thus considered medium risk.





Nanih Waiya Fire Department

The Fire Department structure is surrounded by vegetation and in proximity to the school that has a wastewater critical facility.



Calvary Water

The water well adjacent to Hwy 25 is rated medium due to its importance as water source for the residents in this area.

- EMEPA Substation East of Louisville
- EMEPA Substation On Eastern edge of the County on Hwy 14
- EMEPA Substation On Hwy 397, West of Nanih Waiya School

These electric substations are rated medium as they produce power to the residents in the County.

The following critical facilities are ranked as **Low** risk.

- Mars Hill VFD
- Shiloh VFD

This area are well maintained, has low fuel ignitability. They received a Low rating.

- Bond Water Tank
- Indian Springs Water Tank
- High Point Water Tank
- Poplar Flat Water Tank
- Webster Water Tank
- Nanih Waiya Water Tank

These areas are in fairly well maintained and pose minimum risk.

- Repeater Tower
- Cell Tower

These towers are located in areas of low fire hazard and are ranked Low risk.

Correctional facility

This facility being outside the high occurrence area and being well maintained got a Low risk ranking.

- Whitehall Water
- Nanih Waiya Water
- Bond Water
- Calvary Water
- Flow Ridge Water
- Southeast Water

These water wells are in fairly safe areas and are considered Low risk.

Nanih Waiya Wastewater

This facility outside the high occurrence area is ranked Low.

In Winston County, emergency preparedness for each of the volunteer fire departments is continually reviewed and assessed by the Winston County Emergency Management Agency. This assessment involves factors such as equipment availability and age, public protection classification, and manpower. Mutual aid agreements exist between all of the fire departments within the county, and many grants have been utilized over the years to obtain needed equipment.

Every fire district in counties and municipalities in the State of Mississippi receive a public protection classification through the Mississippi State Rating Bureau (MSRB). This classification is the basis for determining the fire insurance rating for each district. The Fire Districts within Winston County are listed below, with their corresponding rankings.

Fire District Ratings

Clay Fire District	Class	Effective Date	Terr. Code	F.D. Response
				· · · · · · · · · · · · · · · · · · ·
BETHEDEN VOL. F. D.	10/C	9/9/1994	800	
EAST WINSTON VOL. F. D.	10/C	7/7/1988	800	
HIGHPOINT VOL. F. D.	10/C	5/26/1989	800	
LOBUTCHA VOL. F. D.	10/C	2/20/1990	800	
LOUISVILLE	7	10/3/1977	800	PR
MARS HILL VOL. F. D. OF WINSTON COUNTY	10/C	7/26/1988	800	
NANIH WAIYA VOL. F. D.	10/C	2/20/1990	800	
NOXAPATER	9		800	PR
SHILOH VOL. F. D.	10/C	2/20/1990	800	

Source: Mississippi State Rating Bureau

Note - 10/C Indicates area with a Certified Class 10 Fire Dept.

^{*} Indicates Alternate Water Supply therefore hydrant distance is waived.

[^] Indicates Class 10 applies over 5 miles from fire station

In many cases, volunteer firefighters work side-by-side with the Mississippi Forestry Commission. This has been a fairly successful relationship but improvements could be made. The fire coordinator reports that 75% of the time the volunteer firefighters have a woods fire contained before MFC is on the scene. It is recommended that biannual meetings be established to share these types of problems and develop solutions. The roles and responsibilities of each agency need to be better understood.

The Steering Committee also identified manpower concerns including recruitment and retention. It is difficult to recruit and retain volunteer firefighters and some of this can be attributed to fatigue, fuel cost and time efficiencies. Creation of full-time paid firefighter positions, increased incentives and a community outreach awareness program were identified as objectives to address manpower issues. It is also possible that training needs will change in the future to include a need for more wildfire fighting capabilities.

As part of this project, research was conducted to identify incentives and recruitment techniques used for other volunteer fire departments across the nation. Steering Committee members suggested that incentives be provided to volunteer firefighters in Winston County in an effort to increase retention.

A community outreach program should be implemented to encourage young adults to consider volunteer firefighting. This program could be implemented through the local high school where students could be made aware of the opportunity to serve and might consider doing so at the legal age.

Another community outreach/recruitment effort is for volunteer fire departments to become involved with the local Boy Scouts of America through the explorer program (www.scouting.org). Many times, BSA can provide program direction, resources, and insurance to cover the department which allows for much more involvement by an explorer scout than a typical youth under 18.

An apprentice firefighter program working with local youth is also an option. While not allowed to fight fires, these youth may be able to gain training through department exercises, and after a set period of probation, may be able to ride along on service calls in a support function. The youth would support by providing drinks, supplies or other equipment that is needed on-site. This program could also act as a probation period leading to a career as a volunteer firefighter.

It is suggested that the fire service create and maintain an on-going recruitment program which identifies the current manpower needs as well as those expected over the next five years. Creating and having recruitment kits on-hand for prospective candidates and enlisting the local community through newspaper inserts and recruitment flyers placed at local restaurants and other businesses may also be successful.

Posting recruitment information on the county website, local cable announcements and any community mail-out or newsletter, as well as coordinating recruitment efforts with other county departments (e.g. Public Works) will be cost effective and reach potential recruits who would otherwise be missed.

Though the county may lack resources to hire full-time, paid firefighters or offer fringe benefits as incentives to volunteers, there are some low-cost or no-cost strategies that may help to retain firefighters. Points can be awarded to individuals for response calls, meeting attendance, drills, fundraisers, training courses or any other set activity. These accumulated points then correspond with certain "prizes." Prizes may include gift certificates to area merchants or restaurants (donated), tickets to sporting events or other community events and complimentary membership to county sponsored/owned amenities (parks, pools, concerts).

In addition to the MSRB Rating and manpower issues, equipment status has been assessed. A list of current large equipment with description, age and location is provided below. The departments utilize a variety of large firefighting equipment, but they have need for additional smaller equipment, such as brush trucks, to access smaller roads in the county. The trucks could be placed strategically at fire stations throughout the county.

The county also reports problems in communicating electronically with the MFC. They request that radio channels be shared to improve two-way communication.

It is suggested that the Winston County Emergency Management Agency review its equipment on an annual basis as it continues to age. It is generally recommended that trucks be replaced every 15 to 17 years. Better equipment will not only result in better emergency preparedness but may also affect the insurance ratings of the homeowners.

Access to water to fight fires has been identified as an issue in Winston County. It is recommended that the county inventory private ponds and other water sources to fill up pumpers in the county.

FIRE DEPARTMENT EQUIPMENT AND PERSONNEL

DEPARTMENT	VEHICLES	PERSONNEL
Louisville FD	2003 Sterling Pumper	25
Noxapater VFD	2005 Sterling Pumper 1990 International Pumper 1999 Dodge Rescue	20

Betheden VFD	2001 GMC Pumper 1990 International Pumper 1985 Chevrolet Grass Truck	18
East Winston VFD	1984 Chevrolet Grass Truck 1985 Chevrolet Grass Truck 1982 Mack Tanker 1990 International Pumper	16
High Point VFD	1994 Chevrolet Brush Truck 1984 Chevrolet Grass Truck 1990 International Pumper	18
Lobutcha VFD	1976 Ford Pumper 1976 Chevrolet Tanker 1982 Chevrolet Grass Truck 1999 GMC Pumper	08
Mars Hill VFD	1970 Ford pumper 1985 Chevrolet Grass Truck 1990 International Pumper 2005 Sterling Pumper	11
Nanih Waiya VFD	1986 Chevrolet Grass Truck 1967 Chevrolet Pumper 1990 International Pumper 2005 Sterling Pumper	19
Shiloh VFD	1985 Chevrolet Grass Truck 1999 GMC Pumper 1972 AM General Tanker	12
Winston County	2002 Freightliner Tanker	04

VII. MITIGATION PROJECTS AND STRUCTURE IGNITABILITY RECOMMENDATIONS

Through the Community Risk Assessment several areas for improvement were identified. Mitigation projects for the at-risk areas may involve removal or reduction in fuel load for some, a public awareness campaign for others, or a combination approach.

No specific treatment projects for Critical Infrastructure sites, Vulnerable Facilities or Areas of Community Importance were identified or found to be necessary at this time. These sites are generally well maintained and have moderate to low ignitability potential. However, the risk of wildfire should always be considered as nearby lands continue to be converted to large residential developments.

High occurrence wildfire areas and fuel hazard area mitigation projects were limited to a community outreach and education program. The Steering Committee also identified the need for these areas to be re-visited in the future for creation and implementation of other mitigation projects.

The structure ignitability recommendations below can be formulated and then distributed to homeowners. These recommendations, as condensed from information found at www.firewise.org, are steps that property owners can take to improve the protection and survivability of a structure in the event of a wildfire. It was also recommended by the Steering Committee that a minimum distance between structures should be designated and included in county construction ordinances as follows:

- 1. Maintain minimum distance between structures as recommended by the National Fire Protection Association
- Maintain a minimum radii of outside edge at dead-end turnaround circle of 45 feet to provide for emergency vehicles on both surface ditch and curb/gutter roadways
- 3. Maintain minimum width standards for subdivision roads and access roads to individual homes per pending subdivision regulations

Min. width of surface ditch roadway with *local* designation: 28 ft.

Min. width of surface ditch roadway with *collector* designation: 34 ft.

Min. width of curb and gutter streets with *local* designation: 27 ft.

Min. width of curb and gutter streets with *collector* designation: 33 ft.

STRUCTURE IGNITABILITY RECOMMENDATIONS

COUNTY

Develop a homeowner education program

Encourage new, large residential developments to become Firewise USA Communities (e.g. Wildwood)

Develop maintenance program to eradicate/control Cogon grass

Perform home assessments to help residents identify ways to create defensible space

Partner with MFC to work with large, private landowners to identify areas with standing dead trees and then remove them and/or create fire breaks (e.g. Weyerhaeuser)

LAND OWNERS

Provide a clearing of at least 30 feet around structure for firefighting equipment access

Space trees at recommend distances

Remove "ladder fuels" that can link grasses to tree tops

Maintain the irrigation system

Prune tree limbs so the lowest is between 6' - 10' from the ground

Remove leaf clutter from roof and yard

Mow regularly

Remove dead and overhanging branches

Store firewood away from the house

Don't keep combustible materials under decks or elevated porches

Make trellises of non-flammable metal.

Prevent sparks from entering house by covering vents with wire mesh no larger than 1/8 inch

Use construction materials that are fire-resistant or non-combustible when possible

The Action Plan is an outline of the work to be completed. The Assessment Strategy portion of the CWPP will ensure that Mitigation Projects and Action Plan items are accomplished in a timely manner and monitored to measure the project's success.

1. Improve communication among related responding agencies through cooperative agreements to use similar range radio frequencies. This will allow better communication and efficient response in emergency situations. Sharing cell phone contact numbers among the agency personnel and use of portable repeaters will enhance emergency response operations.

Responsibility: Winston County Emergency Management Agency, Volunteer Fire Departments, Board of Supervisors

Funding: Homeland Security or other grant funds

Timetable for Completion: 1 year to establish agreements; and then on-going to keep information updated (cell phone contacts).

Expected Outcome: Better assistance and firefighting capability

Assessment Timetable: review progress annually

 Purchase of brush trucks that could be strategically placed at fire stations to better fight wildfires.

> Responsibility: Winston County Emergency Management Agency, Volunteer Fire Departments, Board of Supervisors

Funding: \$150,000 each, possibly through Homeland Security or other grant funds

Timetable for Completion: 3 years or as grants become available

Expected Outcome: Better access and firefighting capability

Assessment Timetable: review progress annually

3. Establish biannual meetings between the Mississippi Forestry Commission and the Winston County Volunteer Fire Departments.

Responsibility: Winston County Emergency Management Agency and the Mississippi Forestry Commission

Funding: \$0

Timetable for Completion: Implement immediately

Expected Outcome: Improved communication and coordination in the areas of firefighting, training, safety and project management

Assessment Timetable: 2-5 years

4. Create community outreach and education program including mail-out and county website, listing specific fire concerns in the area and steps that homeowners can take to reduce ignitability potential. Include the roles and responsibilities (liability) that private property owners incur by burning debris.

Responsibility: Winston County Emergency Management Agency in coordination with Mississippi Forestry Commission and local Volunteer Fire Departments

Funding: Homeland Security Fire Safety Grant, possible coordination with local utility or county agency for inclusion in regular mail-out

Timetable for Completion: October 2009, Coordinate with Fire Prevention Awareness Month

Expected Outcome: Implementation of Firewise safety measures by homeowners, including an increase in properly assigned and visible residential addressing as well as a decrease in non-compliant residential burns

Assessment Timetable: Winter 2009

5. Community outreach program to educate citizens, specifically young adults, about the volunteer firefighter program and its importance. This program could include a high school component where students are made aware of the program so that they might consider serving at some

point in the future. Also to include National Fire Protection Association public service announcements.

Responsibility: Winston County Emergency Management Agency, Volunteer Fire Departments, Mississippi Forestry Commission

Funding: Volunteer Fire Departments, grants, Mississippi Forestry Commission

Timetable for Completion: 1-2 times per year in coordination with Fire Awareness Month

Expected Outcome: Increased community awareness of the need for volunteer firefighters and increase in volunteer recruitment

Assessment Timetable: Annual review of recruitment efforts and numbers

6. Maintain and update the grants/funding resource list included in CWPP document.

Responsibility: Winston County Emergency Management Agency, Golden Triangle Planning and Development District

Funding: \$0

Timetable for Completion: Yearly

Expected Outcome: Additional grant applications resulting in an increase of grant funds

Assessment Timetable: Review applications vs. annual funding

7. Maintain, update and redistribute the CWPP maps to all county departments, volunteer fire departments and other organizations utilizing the document.

Responsibility: Winston County Emergency Management Agency,
Planning Department and Southern Mississippi Planning and
Development District

Funding: \$0

Timetable for Completion: Yearly

Expected Outcome: Increased awareness of fire activity leading to implementation of action plan in an effort toward reduction of fire incidents

Assessment Timetable: Make any additions or changes to maps on an annual basis and interview other organizations to see if the maps make their role in wildfire prevention more effective

8. Identify and map private ponds and other water sources to fill up pumpers in the county.

Responsibility: Winston County Emergency Management Agency, GTPDD GIS Division

Funding: Grant or GIS department

Timetable for Completion: Spring 2009

Expected Outcome: More access to water to fight wildfires

Assessment Timetable: Summer 2009 – update every 2 years

10. Hiring of additional full-time firefighting staff for Winston County.

Responsibility: Winston County Emergency Management Agency, Winston County Board of Supervisors

Funding: Grant or Board of Supervisors

Timetable for Completion: 2 years or as grant becomes available

Expected Outcome: More time and resources to dedicate to fire prevention, etc.

Assessment Timetable: in 2 years or as grant applications are made

Potential Funding Sources

1. Assistance to Firefighters Grant (AFG) Program "Fire Grants"

Website: www.firegrantsupport.com

Program Description: Funding for training, equipment, vehicles, firefighter

health and safety program and operations.

2. The SAFER (Staffing for Adequate Fire and Emergency Response) Grant

Website: www.firegrantsupport.com

Program Description: Provide funding directly to fire departments and

volunteer firefighter interest organizations in order to help them increase the number of trained, "frontline" firefighters available in their communities.

Fire Prevention and Safety (FP&S) Grant Program

Website: www.firegrantsupport.com

Program Description: Support projects that enhance the safety of the

public and firefighters from fire and related hazards. Outreach to high risk target groups including children, seniors and firefighters. Monitor website

for further information on eligible activities.

4. USDA Rural Development Community Facilities Program

Website: www.rurdev.usda.gov

Program Description: Provides financial assistance to develop essential

community facilities for public use in rural areas. These facilities include schools, libraries, childcare, hospitals, medical clinics, assisted living facilities, fire and rescue stations, police stations, community

centers, public buildings and transportation.

5. U.S. Smokeless Tobacco Company Polaris Ranger Donation Program

Website: www.ustinc.com

Program Description: Donation of Polaris Ranger 6X6 off-road utility

vehicles for firefighting, rescue, police, emergency medical service, and wildlife law enforcement organizations. 2009 Operation Ranger application is expected to be available on this website in October

2008.

6. First Responder Institute Website

Website: www.firstresponder.org

Program Description: Provide support to local U.S. fire departments and

emergency service personnel.

7. Responder Knowledge Base Website

Website: www.rkb.mipt.org

Program Description: Website contains information on currently available

products, standards, training and grants.

8. Grants Office

Website: www.firegrants.info and www.grantsoffice.com

Program Description: Provides info, tools, and tips for fire departments to

be successful in obtaining funds from the AFG

Program.

X. REFERENCES

- 1. Winston County Hazard Mitigation Plan
- 2. Winston County Comprehensive Emergency Management Plan
- Visitors and Newcomers Guide by the Winston County Journal at home in Winston County www.winstoncountyjournal.com
- 4. National Wildland/Urban Interface Fire Protection Program Wildland/Urban Interface Fire Hazard Assessment Methodology
- 5. Pearl River County, Mississippi County Wildfire Protection Plan (CWPP)
- 6. Firewise

 <u>Around Your Home</u> brochure

 www.firewise.org
- 7. USDA Forest Service
 Preparing a Community Wildfire Protection Plan

XI. PROJECT CONTACTS

1. Winston County Emergency Management Agency

P O Box 311 117 S Court Louisville, MS 39339 Phone: 662.773.3651

Fax: 662.773.8831

2. Mississippi Forestry Commission

301 N Lamar St, Suite 300 Jackson, MS 39201 Phone: 601.359.1386

Fax: 601.359.1349 www.mfc.state.ms.us

3. The Nature Conservancy

405 Briarwood Drive, Suite 101

Jackson, MS 39206 Phone: (601) 713-3355 Fax: (601) 982-9499

www.tnc.org

4. Golden Triangle Planning and Development District

P O Box 828 106 Miley Dr Starkville, MS 39760-0828

Phone: 662.324.7860 Fax: 662.324.7328 www.gtpdd.com